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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/384,108      | 08/27/1999  | MICHAEL ANTHONY DOYLE | T8464929US          | 7387             |

7590 05/13/2004

GOWLING STRATHY & HENDERSON  
SUITE 4900  
COMMERCE COURT WEST  
TORONTO,  
CANADA

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| EXAMINER |
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SHAH, CHIRAG G

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2664

DATE MAILED: 05/13/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/384,108

Applicant(s)

DOYLE ET AL.

Examiner

Chirag G Shah

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 7, 13, and 14, rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander (U.S. Patent No. 6,272,120) in view of Baker (U.S. Patent No. 5,570,366).

Referring to claims 1, 7, and 13, Alexander discloses in columns 13 and 14, a multi-radio bridge (communication device) comprising a process for controlling the operations of the multi-radio bridge, a single routing table coupled to the processor, at least one antenna, a first and a second radio device wherein radio device can be a frequency hopping radio device or direct sequencing device, with roaming capability and comprising of a wired or a wireless interface. Alexander further teaches in columns 2 and 3 that the multi-radio bridge can dedicate two or more radios operating at different FH sequences and/or PN codes, thus indicating that the second type radio may be different than the first type radio dependent on the requirement of the specification. Alexander fails to disclose a data controller for controlling data traffic between the wired network and the first and second type of wireless device including a filter device for filtering data for transmission by one of the radios when the data is received from the wired network for the respective wireless device. Baker teaches of filtering by a bridge based Access Point. Baker discloses in columns 4, 5 and figure 8 and respective portions of the specification

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of filtering mechanisms that can be used in the access point that connects the wired LAN to the wireless LAN, in a number of different combination, to provide optimal broadcast filtering to optimize use of wireless bandwidth available to mobile users of the wireless LAN. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Alexander to include the teachings of Baker in order to manage, control and filter data traffic between wired and wireless devices to overall optimize network efficiency.

Referring to claims 2, 3, 14, and 15, Alexander in view of Baker teaches a communication device for facilitating communication between a wired network having a wired communication device and wireless devices such as access points including a filter device for filtering data for transmission by one of the radios. Alexander in view of Baker fails to explicitly teach a communication device wherein the wireless devices are assigned a respective address, and data sent from and destined for the wireless devices includes the address of the respective wireless device and the data controller function in a first mode using the first type radio when data is transmitted from or destined for the first type wireless device and functions in a second mode using the second type radio when data is transmitted from or destined for the second type wireless device, the first and second modes being selected in accordance with the address included in the data. Meier teaches in column 11 lines 1 to column 12 lines 9, that each node (wireless device) has a unique long address, which is programmed into the node at the factory and the long address is used only to obtain a short address from the root node. A single controller may be designated as the root and may negotiate to determine which node is the root. Thus, as disclosed in column 11, the network entity in each node filters address packets based on the network address. Therefore, it would have been obvious to one of ordinary skill in the art to

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modify the teaching of Alexander in view of Baker to include the teachings of controller's addressing functions as taught by Meier in order to transmit data to the destined node by reducing overhead and latency.

Referring to claim 5, Alexander teaches in column 5 lines 23 to column 6 lines 23 that the first type radio, an access point may comprise a first radio coverage area and the second radio, a second access point has a different coverage area while bridge apparatuses are distributed to cover a predetermined area with radio coverage of the bridge apparatuses as in claim.

3. Claims 6, 8, and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Baker as applied to claims 1, 2, 5, 7, 13, and 14 above, and further in view of Warren (U.S. Patent No. 5,912,921).

Referring to claims 6, 8, and 9, Alexander in view of Baker discloses in columns 13 and 14, a multi-radio bridge comprising a process for controlling the operations of the multi-radio bridge, a single routing table coupled to the processor, at least one antenna, a first and a second radio device wherein radio device can be a frequency hopping radio device or direct sequencing device, with roaming capability and comprising of a wired or a wireless interface. Alexander in view of Baker discloses wireless access points. Alexander in view of Baker fails to disclose that the first and the second type radio in accordance with the IEEE 802.11 specification. Warren teaches of a method for operating a wireless local area network, and discloses in column 7 lines 40-65, wireless devices may reserve a frequency for a predetermined time interval. The IEEE 802.11 standard can be used for a channel reservation mechanism including a request-to-send/clear-to-send system ("RTS/CTS"). Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to include the teaching of IEEE 802.11 standard for wireless radio devices as disclosed by Warren into Alexander in view of Baker's invention in order to provide standard of specification and compatibility parameters to provide the highest throughput.

Claims 4 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Baker as applied to claims 1, 2, 5, 7, 13, and 14 above, and further in view of Cheung (U.S. Patent No. 5,901,362).

Referring to claims 4 and 16, Alexander in view of Baker teaches in figure 2, that information is transmitted between various devices in the communication system preferably in the form of packets using Spread Spectrum wireless communication techniques. Alexander in view of Baker fails to disclose that wireless devices includes wireless protocol information which indicates a wireless protocol used for communicating the data, and the data sent from the wired network includes wired protocol information which indicates a wired protocol used for communication data over the wired network including a protocol converter. Cheung teaches of an internetworking node that acts for all wireless nodes associated to it in relaying messages between wireless nodes or between a wired Local Area Network (LAN) and the wireless nodes. Cheung discloses in claim 15, a method of sending data message via a wired LAN adapter and receiving data from other wired nodes along the wired LAN that is capable of interconverting such data between a format suited to be sent or received by wired LAN adapter whereby internetworking node can receive data from wired LAN and transmit it by wireless communication and can also receive data by wireless communication and transmit it along the wired LAN. Hence, protocol conversion between wired and wireless is being executed.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include protocol conversion as taught by Cheung in Alexander in view of Baker's invention to clearly distinguish wired data from wireless data.

### ***Response to Arguments***

4. Examiner accepts Applicant's decision to cancel claims 10-12 and 18-20.
5. Applicant's arguments with respect to claims 1-9 and 13-17 have been considered but are moot in view of the new ground(s) of rejection.
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

**Any response to this final action should be mailed to:**

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**Box AF**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703)305-9051, (for formal communications; please mark "EXPEDITED  
PROCEDURE)

**Or:**

(703)305-5403 (for informal or draft communications, please label "PROPOSED"  
or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal  
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The  
examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone numbers for the  
organization where this application or proceeding is assigned are (703) 872-9306 for regular  
communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is 703-305-3900.

cgs  
April 7, 2004

  
**Ajit Patel**  
Primary Examiner